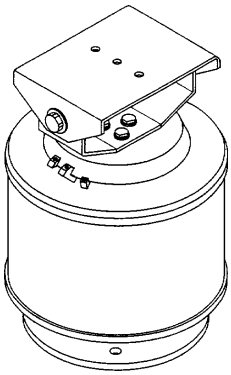

PS30A and PS30-24 Scanners

Installation/ Operation Manual

C360M-I (11/99)

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IMPORTANT SAFEGUARDS AND WARNINGS

Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by qualified service personnel and conform to all local codes.
2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X ,6 or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
3. The camera and lens combined weight shall not exceed 50 pounds (23 kg).
4. Only use replacement parts recommended by Pelco.
5. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.
6. Use only installation methods and materials capable of supporting four times the combined weight of the enclosure, scanner, camera, and lens.

The product and/or manual may bear the following marks:

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION:
RISK OF ELECTRIC SHOCK. DO NOT OPEN.

Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

DESCRIPTION

The PS30A and PS30-24 are medium-duty indoor/outdoor scanners, constructed to operate with loads up to 50 pounds (23 kg). These scanners are equipped with a high-torque AC motor, in either 24 VAC or 120 VAC, with adjustable heavy-duty worm gear final drives that eliminate backlash and drifting. They are designed to allow only the CCTV enclosure and the mounting plate to rotate, resulting in a smoother, more reliable scanner.

You can wire the unit to scan left and right continuously or manually.

MODELS

PS30A	Medium-duty scanner, 120 VAC
PS30-24	Medium-duty scanner, 24 VAC

INSTALLATION

MOUNTING

CAUTION: *The scanners are designed to operate in an upright or inverted position only. Do not mount the scanners horizontally.*

1. The PS30A and PS30-24 can be mounted upright or inverted. Attach the scanner to a flat surface with four bolts. If you use a wall, ceiling, or pedestal mount, follow the instructions that are provided with the mount. Make sure the mounting surface can support four times the combined weight of the scanner plus the camera and lens, or enclosure, camera, and lens. The scanner weighs 11 pounds (5 kg). Refer to the manuals for your enclosure, camera, and lens for the weights of those units. The weight of the camera and lens, or enclosure, camera, and lens must not exceed 50 pounds (23 kg).

2. If you installed the scanner in an upright position, remove the 10-32 Allen screw from the bottom plate. If you installed the scanner in an inverted position, remove the 10-32 Allen screw from the top plate. Retain the screw.

3. Center (balance) the camera and lens, or enclosure, camera, and lens load on the tilt table. Adjust the positioning as needed to align the mounting holes. Mount the camera or enclosure to the tilt table with two 1/4-20 hex head bolts (not supplied). Position the camera at the desired angle by manually adjusting the tilt table.

ELECTRICAL INSTALLATION

This section provides instructions for wiring the scanner only. To wire the camera and lens or camera enclosure, refer to the manuals for that equipment.

MATING CONNECTOR ASSEMBLY

Assemble the cable to connect to the scanner. A mating connector is supplied as loose equipment. To assemble the mating connector, refer to Figure 1 and perform the following steps.

1. Refer to Figure 2 or 3 for the number of wires required. Choose between either continuous-duty or remote control operation. For remote control operation, refer to Table A to determine the size of wire to use. Scanner distance can be extended with the use of an RB115 (PS30A) or RB24 (PS30-24) Relay Box.

2. Slide the connector clamp assembly over the conductor cable. If the diameter of the conductor cable is such that the rubber boot will slide over it easily, slide the rubber boot onto the conductor cable at this time. If not, discard the rubber boot.

3. Refer to Detail A in Figure 1. Prepare the wires from the conductor cable as follows:

   a. Strip at least one inch (2.54 cm) from the cable jacket to expose the wires. You may need to strip more from the cable jacket if you have more wires.

   b. Strip .125-inch (3 mm) from each wire.

   c. Using an AMP style crimper, crimp the wires and their insulation to the connector pins.

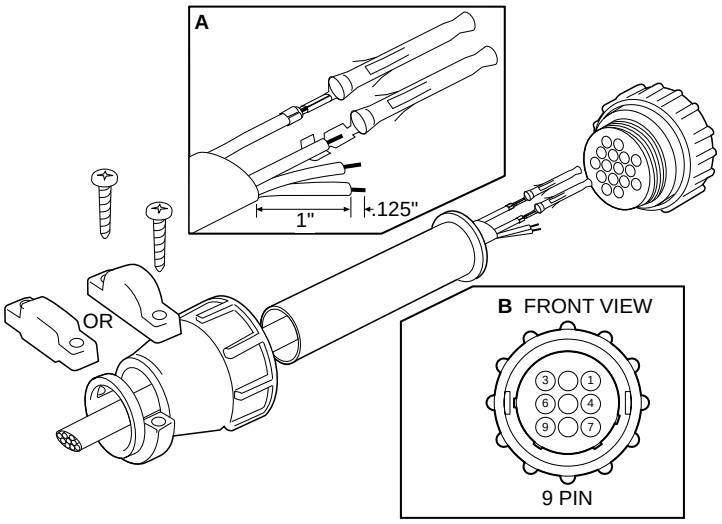


Figure 1. Connector Assembly

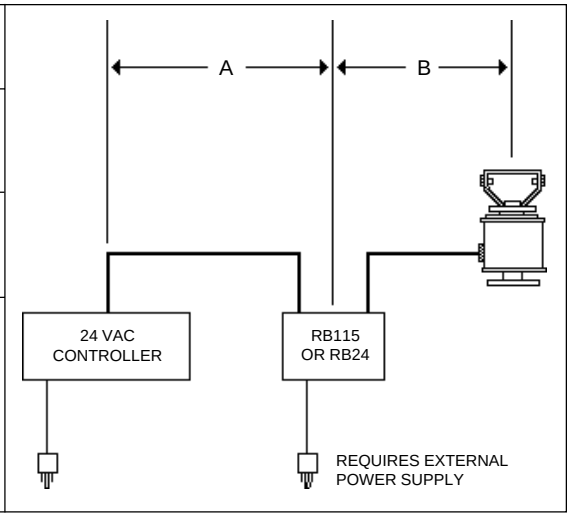
Table A. Cable Distances*

Model	Wire Size (AWG)	Maximum Distance "A"	Maximum Distance "B"
PS30A	20 18 16	5,800 ft (1,768 m)** 8,250 ft (2,515 m) 13,000 ft (3,962 m)	2,467 ft (752 m) 3,925 ft (1,196 m) 6,229 ft (1,899 m)
PS30-24	20 18 16	5,800 ft (1,768 m)** 8,250 ft (2,515 m) 13,000 ft (3,962 m)	118 ft (35 m) 188 ft (57 m) 298 ft (90 m)

NOTE: *If RB24 or RB115 Relay Box is not used, maximum cable length is distance "B."*

** Conductors are for left and right functions, motor common, and safety ground. Cable distances are calculated with the motor running and assuming a 10% voltage drop in the cable.*

*** Not recommended for reliable service between control and relay box.*



NOTE: *Contacts cannot be removed from the connector without the use of the appropriate AMP extraction tool (ZT305183), which is available from Pelco.*

NOTE: *When a scanner is mounted in the inverted position, the LEFT/ RIGHT functions are reversed during operation. To correct this problem, reverse the LEFT/RIGHT functions in the control cable (pins 3 and 2) at the scanner or control.*

4. Slide the connector pins into the appropriate holes in the connector body until they snap into place. Refer to detail B in Figure 1 and to Figures 2 and 3 for the correct pin arrangement.

5. Push the connector clamp assembly (with boot, if used) toward the connector body. Screw the clamp assembly onto the connector body, being careful not to disturb the wires.

6. To complete the assembly, attach the appropriate clamp with the screws provided and tighten.

7. For remote control operation, refer to Figure 4 to wire the other end of the cable. If a relay box is not used, wire the scanner directly to the control unit.

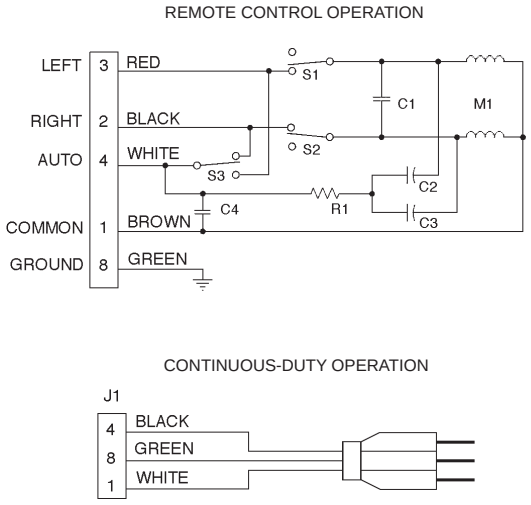


Figure 2. PS30A Schematic and Wiring Diagrams

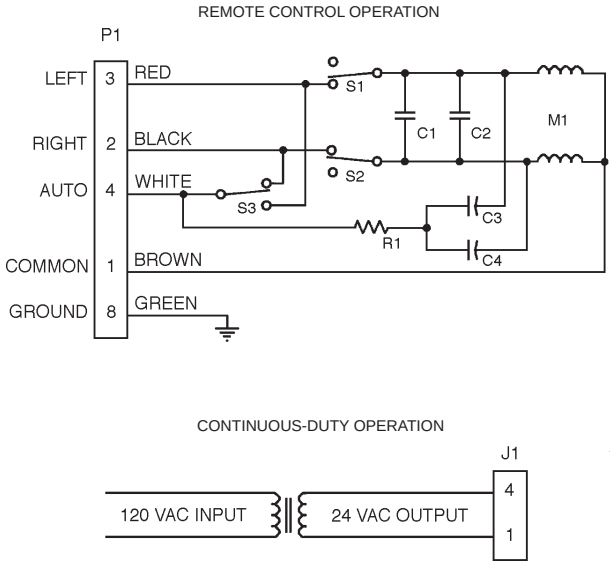


Figure 3. PS30-24 Schematic and Wiring Diagrams

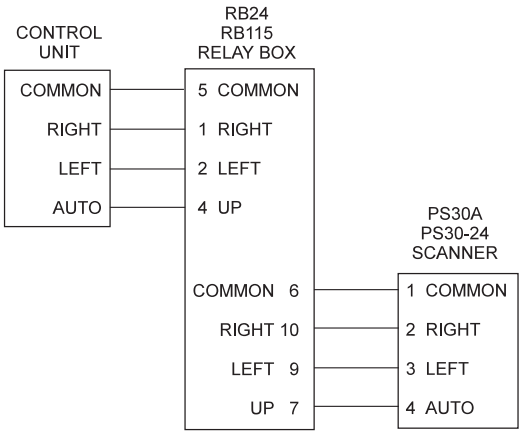


Figure 4. Control Unit Wiring

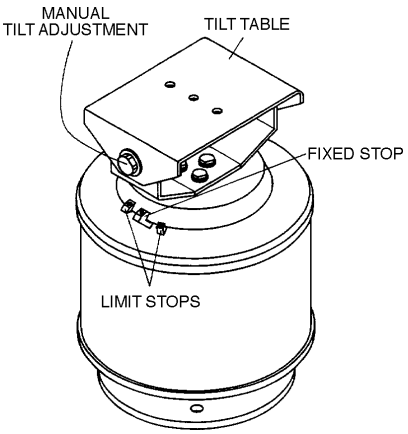


Figure 5. Limit Adjustments

LIMIT STOP ADJUSTMENTS

WARNING: *Do not operate the scanner without limit stops. Do not attempt to adjust the limit stops while the unit is operating. Personal injury or damage to the unit may result. Do not remove or reposition the fixed limit stop on the scanner. DAMAGE WILL OCCUR.*

To set pan limit stops, perform the following steps. Refer to Figure 5.

1. Loosen the pan limit stops.
2. Operate the scanner. Pan the unit to the right until the desired right pan limit is reached.
3. Move the right pan limit stop until it touches the pan limit switch actuator. Push the stop against the actuator until it clicks, indicating that the limit switch has opened. Lock the stop in place.
4. Pan the unit to the desired left position. Adjust the left pan limit stop as described in step 3.
5. Pan left and right to both limit stops and check for exact positioning. Tighten both stops securely.

MAINTENANCE

The PS30A and PS30-24 require no lubrication, and the motors are both clutch and impedance protected from overload.

SERVICE MANUAL

If you need to service your unit, obtain a service manual in one of the following ways:

- Go to Pelco's web site at ftp://www.pelco.com and find service manual C360SM.
- Contact Pelco's Literature Department and request service manual C360SM.

SPECIFICATIONS

MECHANICAL

Pan:	0-355° movement in horizontal plane
Speed:	6°/sec ±.5°
Maximum Load:	50 lb (23 kg) centered
Operation:	Upright or inverted
Bearings:	Heavy-duty ball bearings
Overload Protection:	Thermal protected

ELECTRICAL

Input Voltage	
PS30A:	120 VAC
PS30-24:	24 VAC
Power Requirements	
PS30A:	250 mA (28.75 vA)
PS30-24:	1 A (24 vA)
Connectors:	Amp CPC type (mating connector supplied)
Motors:	Two-phase induction type, continuous duty, instantaneous reversing
Limit Switches:	Auto scan switching – 10 amps, external adjustment
Conductors:	5, unshielded (functions: left, right, auto, motor common, safety ground)
Braking:	Friction

GENERAL

Construction:	Aluminum
Finish:	Gray polyester powder coat
Environment:	Indoor/outdoor; -10° to 120°F (-23° to 49°C)
Unit Weight:	11 lb (5 kg)

RATINGS

NEMA 1

(Design and product specifications subject to change without notice.)

WARRANTY AND RETURN INFORMATION

WARRANTY
Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment.
Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.months on DX Series digital video recorders, NVR300 Series network video recorders, Endura™ Series distributed network-based video products, and TW3000 Series twisted pair transmission products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:
1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS
In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).
All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.
If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department
Pelco
3500 Pelco Way
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:
If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco
3500 Pelco Way
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors
473 Eccles Avenue
South San Francisco, CA 94080 USA
Phone: 650-737-1700
Fax: 650-737-0933

REVISION HISTORY

Manual #	Date	Comments
C360M	10/93	Rev. G
C360M-H	9/96	Rev. H. Corrected Table A. Added Figure 4. Deleted fuse assembly from Figure 6. Updated manual format.
C360M-I	11/99	Rev. I. Revised connector assembly instructions and diagram. Moved exploded assembly diagram and parts lists to new maintenance/service manual (C360SM). Updated manual to new format.

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